

INSTITUTE OF EDUCATION SCIENCES

+ + + + +

IES GRANT WRITING WORKSHOP

+ + + + +

TUESDAY,

MAY 20, 2008

+ + + + +

PROCEEDINGS

Slide One:

Dr. Albro: Good morning. I hope everyone can hear us all right. Welcome to the Grant Writing Workshop Webinar. For those of you who have not been on a webinar before, the way this works is that we're going to ask all of you to put your phones on mute so that we don't get any background interference. I'm going to walk through the slides which you all should have in front of you.

And if during the presentation you have questions that you'd like to ask, please use your chat function to e-mail to I guess it's Mark. E-mail the question to him and he'll make sure it comes to us. And I will pause at sensible places during the presentation and answer your questions in a group at that time. So I'm going to try to go at an appropriate pace, but if I'm going too fast just let Mark know and I will attempt to slow down.

Here we go. So the purpose of this webinar is really to walk you through the requirements of the IES Research RFAs (Request for Applications) and to help you think about the kinds of information that is important to include, the kinds of questions that you should be thinking about, as you're beginning to prepare your proposals as well as some of the nitty-gritty details in terms of assembling your grant package.

Slide Two:

Here is the agenda. So what we're going to do is talk about some of the initial questions you need to answer—getting started, where you find the information. Then we're going to talk about the two critical parts of preparing an application for IES. One is identifying the appropriate research topic or program that matches with your area of interest and then figuring which research goal you're going to prepare a proposal around.

Then we'll go through some of the nitty-gritty stuff. We'll talk about preparing the entire proposal. We'll focus on what you need to include in the project narrative. And then I'll share with you a little bit of information about the reviewers' perspectives, the kinds of things they would like to see in proposals.

Slide Three:

I'll talk with you about the submission process and then we'll talk about what happens after you submit the proposal to the Institute. So I hope this will answer a lot of the questions that you have at this moment.

Slides Four and Five:

The first thing you need to do is make sure that you have the full Request for Applications for the program that you're interested in applying to and the application package that you can get on grants.gov.

Slide Six:

Here are the websites if you're not already familiar with them. Our funding announcements are all on the [IES.ed.gov](https://ies.ed.gov) site and you can get all of our currently available RFAs from that website. For those of you who are not already signed up for the NewsFlash, that's a really good way for you to get information as to when new RFAs are released, when reports are released, any sorts of information that you might be interested

in, when new awards are made. So if you haven't signed up, I would encourage you to do so.

Slide Seven:

And for those of you who want to know where to find that information on the website, the funding opportunities is on the blue bar. It's the second from the left and the NewsFlash, the sign up for the NewsFlash, is right above the Search key.

Slide Eight:

Before we go in, I wanted to make sure that everyone understands the different RFAs that we currently have that are available. So we have—I guess it's five general topics. Some of them are both in Education and Special Education. Some of them are only within the National Center for Education Research.

So we have our research grant programs. There is an RFA for the NCER and for NCSEER and the bulk of this presentation is really focused on preparing proposals for those research grant programs. Some of the general information will hold across, but in terms of specific requirements I'm really going to be focusing on the Research Grant Program.

However, I want everyone to be aware that we also have currently available RFAs in our training programs, both predoctoral and postdoctoral. We are currently competing three National Research and Development Centers. We have an RFA specifically focusing on Statistical and Research Methodology in Education, and finally there is an RFA currently available for the Evaluation of State and Local Education Programs and Policies.

Slide Nine:

Where do you find the application packages? So where do you find the actual materials that you need in order to upload and submit your applications? That information is available on grants.gov.

You can check the specific RFA that you're applying to for when the application packages and instructions are available. They are currently available for all of the June 26th deadlines. However, please note that you will need to download a different application package for the October 2nd deadline, which is our second round of applications, when our second round of applications are due. Don't assume that the ones that you pull down in June or now for June will work for October.

Slide Ten:

For those of you who haven't been to the portal, here's a picture. Start early. Make sure your institution has an account and that you don't run into any stumbling blocks in terms of getting the grants.gov profile set up for you to submit.

Slide Eleven:

Okay. Another preliminary question that you need to consider is thinking about your eligibility. Eligibility requirements are something that will vary as a function of the Request for Applications to which you are applying. So the eligibility that I'm speaking

of right now has to do with eligibility to apply to the Education Research Programs or the Special Education Research program RFAs.

The stated requirement in the RFA is that applicants who can apply are those who have the ability and the capacity to conduct scientifically valid research. Those include, but are not limited to, nonprofit and for profit organizations and public and private agencies and institutions such as colleges and universities.

In general, we do not support research that individuals submit. However, that doesn't mean that you could not apply if you're a small business and you've incorporated and there's only you. You could do that. But, in general, we do not make awards directly to individuals.

Slide Twelve:

So now that we've gotten those preliminaries out of the way, let's start to talk about the meat. The first thing you're going to need to do is figure out what's the appropriate research topic.

Slide Thirteen:

How do you begin? The first thing that I recommend everyone do is read the Request for Applications. I encourage people to read the entire RFA and all the different background sections, even if you think they're not relevant for the question you have. One of the things that I've learned in my time here is that individuals' projects can often sit in more than one topic area, and figuring out which is the best fit for your particular question depends upon your knowing what the request for application says about each of the topics.

Once you've read the RFA, I think another good thing to do is to go onto our website and look under the Projects and Programs page where we have available abstracts for many of the projects, for most of the projects, that have already been funded. I know the fiscal '08 abstracts are not all propagated yet, but they will be coming out soon. And that will give you a good sense of whether the topic that you're proposing fits in with the kind of work that the Institute has been funding.

Slide Fourteen:

Here are the CFDA numbers for the two grant programs. Again, most of this presentation is really focused on the requirements for CFDA Number 84.305A and 84.324A. The other thing you'll notice is that the requirements are highly similar for both the Education Research Grant Program and the Special Education Research Grant Program.

Slide Fifteen:

What are our topics? Under the National Center for Education Research (NCER) we have a set of standing research programs and research topics. They include content, academic content area foci. So we have topics that focus on reading and writing, mathematics and science education. We have a focus on cognition and student learning. So for researchers to come from a cognitive science tradition or a cognitive psychology tradition and would like to take the work that they have done, working predominantly

with college students, and try to apply those principles to the K 12 setting, this is a really good topic for you to do.

We also have a topic for individuals who are interested in understanding the social and behavioral contexts that support academic learning. As a former preschool teacher, I can tell you that if the children are having trouble sitting still and paying attention, it's hard to provide instruction. So we are interested in supporting research where individuals are attempting to understand how to set up classrooms or other learning environments in ways that support attention to academic learning.

We also support research in the area of teacher quality. For teacher quality and the NCER RFA we have two areas. So you can propose to develop interventions, professional development interventions, that look at teachers who teach reading and writing or teachers who are primarily responsible for teaching mathematics and science education.

We also have programs, topics, looking at education leadership. So not only do we want to know better how to improve the skills and abilities and knowledge of our teachers, but we would also like to understand how best to prepare leaders, principals, assistant principals, other individuals who are in leadership positions in schools.

We also have a topic area in education policy, finances, and systems. If there is anyone on the phone who has a background in economics, for example, if you are interested in looking at questions like teacher compensation policies or the way districts allocate funds, we support research in those areas.

Slide Sixteen:

We also have a group of programs that are standing but that are a little bit different that cut across some of the earlier topics. So we have a program on early childhood programs and policies. One of the things that we know about early childhood research is that typically interventions don't target only one area of academic development. –For example, many childhood curricula are comprehensive in nature. So we wanted to have a topic that recognized that and allowed researchers to put in proposals that cut across the academic domain. So if you're interested in doing any kind of work related to early childhood, you should consider submitting to the early childhood programs and policies.

Similarly, in middle and high school reform, we know that there are many students in middle and high school who are struggling and that the structural organization of the schools does not always support successful completion rates in terms of high school graduation for those learners. So we are interested in receiving proposals that look at creative and innovative ways to think about the organization of instruction in the context of middle and high schools.

We are also currently seeking applications that look to improve the outcomes for struggling adolescent and adult readers and writers. So this population is a population that is often not served by special education. However, these are learners who are not reaching their potential, if you will. They are often reading at least two years behind grade level and they're not able to master their content courses. And we know very little about how best to serve these learners. So if anyone has any ideas, we are looking for applications in that area as well.

We have a program that looks at postsecondary education. This is one of our newer topics and the purpose here is to support research that's really looking at students

who are at risk to not enter postsecondary or at risk of not completing postsecondary education. So research in this area you could propose to do work, say, in that transition summer between when you complete high school and when students begin that first year of college. You could look at some of the programs that exist or things that could be done in that initial year of college. So there is a range of different possibilities for the postsecondary portfolio.

We also support a topic in education technology. Education technology is one of these topics where you could look at any of the content areas I described already but where the focus is really on the technological development component of that.

Slide Seventeen:

All right. So here I'm going to go through the Special Education standing research programs and then I'll see if we have some questions here.

As you'll notice within the National Center for Special Education Research, the real distinction here is that research that is going to be submitted to the National Center for Special Education needs to exclusively focus on students who have already received a diagnosis of being in need of special education services or on younger learners who are considered to be at risk for receiving that diagnosis.

Other than that population interest, you will notice that many of the topics are highly similar. So we have a program focused on early intervention and early childhood special education. The difference between this program and the program at NCER is that it also includes research with infants and toddlers. This is the only program across all of our programs that focuses on work with infants and toddlers. Again, the idea here would be that children who have received a special education diagnosis or who are at risk for receiving a special education diagnosis their outcomes, their later outcomes, developmentally can be very much improved if they get targeted intervention early.

Similarly, we have a program in reading and writing and language development. The focus on oral language development is unique for the NCSEER program and really reflects this indication that many children who are at risk, say, for a specific language impairment diagnosis often have challenges with their oral language and we would like to know more how best to serve those learners.

We have a topic in mathematics and science education.

We have a topic looking again at how best to serve the social and behavioral outcomes to support learning for students with special needs.

We have The postsecondary program for NCSEER is really focused on transition outcomes. So it may not be that all special education students will be moving into postsecondary education settings. However, they will be transitioning out of school and we would like to support research that looks at how best to support those transitions, those transition needs.

Slide Eighteen:

For the first time, the National Center for Special Education Research is supporting a research program focused on cognition and student learning. Like the NCER program, we are asking applicants to consider research that has come out of cognitive science and try to use that work to inform instructional practices with young learners or learners of any age, really right, in any way from K to 12.

Similarly, we have a program focused on teacher quality. Again, here the real emphasis is on trying to understand how best to prepare teachers or how best to support the professional development of teachers who will be working in special education.

We have a topic area in related services. Here the idea is to support research that looks at all of the services that surround special education delivery. We also have (and I think this is new this year as well for the first year) we have a program looking at systemic interventions and policies for special education. Again, we're seeking research projects that are trying to understand the systemic ways in which we can support programs and interventions designed to help students with special needs.

And, finally, if there is anyone on the phone who does research with children who are diagnosed on the autism spectrum, we do have a particular topic area requesting research for looking at how best to serve students on the autism spectrum in terms of their academic support.

Slide Nineteen:

All right. So before I move into the Goals, I'm going to look and see what questions we have. Do we have any questions here? All right. I have a question here that says, "Does IES support research that is inclusive of international partnerships?" We actually do not have any requirements that exclude international partnerships. The only requirement that IES has is that the research that is to be proposed should be relevant to the problems that exist in U.S. schools and clearly there are cases you can make in argument where research happening in an international context can be relevant to the work, to the problems, of U.S. schools.

I think the only practical consideration that I would encourage you to think about is who the lead institution is. It's probably a much more straightforward application process if the application comes from a U.S. institution and that institution then would have a sub-award to an international partner.

I have here "You talk about pre K, K 12 and college students but not adult learners served under the Title II Literacy Program. Do you support research for these programs?" Yes, we do and I'm sorry if that was not clear. Under all of our basic academic outcomes, under reading and writing, under mathematics and science education, as well as on the interventions for struggling adolescent and adult readers and writers, we have an explicit inclusion for adult learners who are who still have ways to go in terms of mastering the basic literacy and numeracy needs as well as students who are in vocational education. I believe the postsecondary program also includes vocational education as part of its purview in terms of the students.

"For special education, does it include adult literacy?" No, under special education, we do not have a focus on there is not a focus on adult learners. I think that if you pick your topic area and then contact the appropriate program officer they can help you prepare a proposal in that area.

Here's another question. "Expand on how much the focus must solely be on students with disabilities. For example, universal design for learning can impact the learning for diverse learners." The general distinction here is that if you are proposing a project which includes all learners in the classroom, including students with special needs, you are we generally recommend that you put in a proposal to the National

Center for Education Research. Universal design for learning clearly has implications across the range of students.

So the focus there would be to come in under NCER.

All right. Do you have any other questions about this first part?

All right. I'm going to move on to the discussion of Goals. I want to just give you all a preview here. I'm going to do a quick overview of what our research goals are and then I'm going to talk about some practical requirements and then I'm going to get into much more detail about the methodological requirements that go with each of the research goals. So I know folks will have questions about that and I wanted to let you know that this is sort of a first pass and that later on this morning there will be a more detailed consideration of the research requirements that go with each of the Goals.

Once you figure out your topic, you've determined that you're eligible to apply, you've determined what your research topic is, then the next thing you need to decide is which of the which research goal am I preparing a proposal for.

Slide Twenty:

We have five different goals under each of our topics areas and this is true across both the NCER and NCSER RFAs.

Goal One is our Identification Goal and the purpose of the Identification Goal is to identify and/or explore programs, practices, or other malleable factors that are associated with better student outcomes.

Our Goal Two is to develop a new education intervention. I should let everyone know that when I talk about education interventions you should take that in the broadest possible way. I don't mean sort of simply a curriculum. It could be a program, a practice. It could be a policy, trying to use a shorthand here. Right? So anything that you think can be implemented within the school context.

Our Goal Three is the Efficacy and Replication Goal. The purpose here is to begin to attempt to answer that causal question: what works, for whom, and under what conditions? The purpose here is to evaluate the efficacy of already developed interventions.

Our Goal Four is our Scale up Goal and the goal here is to evaluate the impact of interventions implemented at scale. The methodological requirements for Goal Four are highly overlapping with the requirements of Goal Three. The purpose here though is to test the causal question when the intervention is being delivered by typical classroom teachers without a lot of additional support, what normal practice would look like.

And, finally, we have a Measurement Goal, Goal Five, where the purpose is to develop and/or validate measurement tools. One of the things to recognize about our Measurement Goal is that the types of tools that you can develop and/or validate vary as a function of the topic and I will talk about that in greater detail. But just know that if you're planning on putting in a measurement proposal, you need to make sure that you have picked a topic that maps well onto the measurement tool that you're planning to develop.

Slide Twenty-one:

Here are some general characteristics of the goals. For Identification, as I said, the purpose, the overarching purpose is to identify or explore education programs, practices,

and malleable factors that are associated with better student learning and achievement outcomes.

Underneath this Goal, we support three types of projects. The first type is a secondary analysis of a longitudinal dataset. This could be a national dataset, say, something that NCES has collected, maybe the Early Childhood Longitudinal Study dataset, maybe the NAEP dataset, maybe the baccalaureate and maybe beyond, any of those. It could also be a state or district-level dataset where, say, the district where you've been living and you are aware that a particular policy or a particular curriculum was administered in a particular year and you would like to compare student outcomes prior to the introduction of that program and after the program was introduced, then this would be an appropriate Goal for you to come in under.

We also include under here the possibility of conducting small descriptive studies whose purpose is really to identify or explore some sort of a program or a practice that looks to be associated with student outcomes. So, for example, maybe you have been in some adolescent English/language arts classrooms and you have noticed that some teachers are doing things, right, providing instruction, providing opportunities, for learners that seem to be associated with improved student outcomes. But you're not quite sure what it is exactly that the teachers are doing. You could propose to conduct a small descriptive study where you closely observe the teachers in those classrooms who seem to be having a positive impact on writing outcomes, maybe compare them to other teachers who are not having such an impact and try to identify what are the things that those teachers are doing, whether it's materials or instruction, that could then be developed into some form of an intervention and other teachers could be taught how to do those things.

Finally, we also support meta analysis work under the Identification Goal. This is new this year and the thing that's important to recognize here is that the use of meta analysis under Identification is to identify and explore factors. It is not to answer causal questions. So if you're interested in using meta analysis techniques, please talk with your program officer to make sure that you're trying to answer an appropriate question under Identification.

Slide Twenty-two:

In terms of availability, in terms of finances, you can request up to between \$100,000 and \$350,000 per year total costs. That is direct and indirect costs included. Please know that this is a range. It's not firm or fixed. So if, for some reason, you require more than \$350,000 per year, you may request that amount and you need to just provide a justification for that request. So you know that is true for all of the goals. The dollar amounts I'm going to quote are ranges, but they're not firm and fixed.

You'll also notice that the time line for Identification Goal is from two to four years. If you are proposing only to do a secondary data analysis, you may only request two years of funding. If, however, you are proposing to collect some additional data, you can request up to four years' worth of funding.

I'm noticing that we have some questions here and I'm going to try and answer them. "Is there a listing of program contacts for each program?" If you pull up the Request for Applications that you were interested in applying to, at the end of the RFA, there is indeed a listing of all the program contacts. You can also go onto our website

and go to our funding opportunities and then you can link to the different topic areas and, on that page, you can actually also get the program contact information.

"Would a way of measuring outcomes be a development of an intervention or a measurement tool?" If the focus I'm probably going to need additional context here. But if the focus of the goal is to develop the tool and to get information about reliability and the validity of the instrument, then you are putting in a Measurement proposal. If you are examining the use of a measurement tool as an intervention, so say, you want to know whether providing teachers with information, so say the teachers deliver an assessment, like an informative assessment, they deliver the assessment, they get information and then theoretically they change intervention and you have that sort of a process and you're examining how that occurs and how that's associated with student outcomes, then that's if you're developing the intervention piece, then it's a Development Goal.

Oops. Sorry. I have to read this quickly and it's moving.

"We noticed the sequencing of Goals One through Four. Does IES give preference to a Goal Two proposal if the PI has already secured and completed work at a Goal One level or, for instance, a preference for Goal Four applications where a PI has held previously Goals One to Three grants?" We do not have any preference for grantees who have received IES funding.

Now there is a developmental sequence here. So the idea is that if you are getting ready to propose a Goal Two project, then you've already identified what those factors are. You don't have to have had an Identification Goal, but you need to explain to the reviewers in your narrative how it is that you have identified the factors that you're proposing to put into your development. And that could be theoretical. It could be derived from other research that's been completed. Similarly, if you're putting in a Goal Four application, then there needs to have been prior efficacy work that's been conducted unless you're proposing to test a widely used intervention and I'll talk about that in more detail when I get to Goal Four.

"Reviewers have commented in the past that weaknesses in a proposal were that they submitted under the wrong Goal or program, yet the proposals were submitted based on lengthy conversations and decisions made with the program officers. Can you briefly address reviewer training and/or should the applicant state at the outset that the program and the Goal was a joint decision of the applicant and program officer?" I can't actually talk about reviewer training because the Standards and Review Office is responsible for that and my office is not responsible for that.

I don't know that including information in the proposal that you had a conversation—that it was a joint decision of the applicant and program officer—that that is something that will have an impact on the review process. Essentially, the program officers give you their best advice as to their understanding of the RFA. But it is up to the reviewers to make that final determination.

I think one of the things that perhaps would be a way to address this is to pull language directly from the RFA that focuses the reviewer's attention on the fit between the project that you're proposing and the topic area. So I think that that's perhaps the best way to handle this situation, right, and certainly continue to talk with the program officers and we will do the best that we can to provide you with guidance that makes sense to us, given our read of the RFA.

This is from the earlier question that said the long term goal is to develop a tool. So if the long term goal is to develop a tool, then I would say put in your proposal under Measurement.

"Is there a site to locate the national datasets that you mentioned?" Absolutely. If you go to the NCES website, so that's nces.ed.gov, that will take you to the National Center for Education Statistics website and in the blue bar across the top, I believe there is a button that says Data Tools and that will take you to all of that information.

"You mentioned 2 years for secondary analyses. Is there a time limit for small descriptive studies or meta analyses?" I believe the meta-analysis work also has a two year time limit. If, however, you are proposing to collect original data, the small descriptive studies, you can request up to four years' worth of funding.

"On page 63, I noticed that award decisions are based in part on performance and use of funds under previous federal awards. This seems contradictory to a response that you just gave and seems to say people are more likely to be funded if you've had previous federal grants." This language, I think that, yes, clearly it's something that is looked at, but it's mostly something internal. So the way this works is that if you have I'm going to say defaulted, that's not the right term. But if you have not If you have been identified as not having spent money wisely prior in a prior federal award, then that will come up in the post review process, all right, as a marker.

I think the other thing to note here is that when we talk about personnel and resources, one of the things that reviewers do pay attention to is the history of investigators in terms of their ability to take prior awards, whether they're federal or foundation awards or even awards at the university level, and completed that research work and translated that into presentations and publications that are then available for the general public. So I hope that clarifies that a little bit.

"If I am understanding correctly, replication studies have previously developed interventions qualified under the evaluation goal. Is this correct?" They do fall under the Efficacy and Replication goal, Goal Three. So I will talk about that more in just a minute.

"Can a proposal be across goals or across programs?" No. You need to select one Goal and you need to select one topic area and this is one of the reasons why it's very important to talk with your program officer because proposals will be considered, will only be reviewed, in relationship to one Goal and one topic area and it could be the case that if you put in one for multiple Goals and/or multiple topics your proposal could be considered nonresponsive and returned without review.

All right. I think I'm going to press on to Goal Two and I'm sure you all will have additional questions.

Slide Twenty-three:

Under Development, all right. I will try to slow down. Under the Development goal, the purpose here is to develop new interventions. These interventions can include instructional practices, curricula, and teacher professional development. These are just for examples. Right. I'm sure that those of you on the line can think about other possible interventions.

But the intent here is to support research that proposes to spend up to 3 years focused on developing an intervention that is ready to be implemented. You are also

responsible for demonstrating the feasibility of the intervention for implementation in an authentic education delivery setting.

One of the things that can happen is that a researcher can develop an intervention that they think is the best intervention ever. But when you then take it into a real classroom and ask someone other than yourself to deliver the intervention you may learn that you've included too much information in the intervention, it takes longer than you thought and the time available in the school context is not sufficient to do all the work that you've asked, all the interventions that you've asked, for a teacher to do.

So in that context, right, we want to encourage researchers to plan to do that and then take that information back, go back to the drawing board as it were, and make revisions to the organization, to the materials, to the materials, whatever needs to be fixed and then test it again.

Under Development, we're really looking for iteration. Right. So we're really looking for people to explicitly plan to develop, test, revise, test, this process until you get to a place where you have an intervention that is ready to be tested in an efficacy study.

This year we are also permitting individuals to propose to collect pilot data on the promise of the intervention to achieve an intended outcome. The restriction here is that you can propose to spend no more than 25 percent of your budget on the collecting of pilot data. Our intent here is really to focus on the development of the intervention itself.

Slide Twenty-four:

I'll turn to the dollar amounts associated with Development. You can request between \$150,000 to \$500,000 per year. Again, this includes both direct costs as well as any institutional indirect costs that you may have. Again, this is not a firm and fixed monetary amount, but it is a range. You can request up to three years' worth of funding to support your development efforts.

Slide Twenty-five:

All right. Goal Three is our Efficacy and Replication Goal. The purpose under Goal Three is to test efficacy of fully developed interventions. This can absolutely involve replication.

I think one of the important things to recognize is that you may have already empirically tested the efficacy of an intervention with a small group of teachers in one particular education context and one of the things that any of us who have been doing education research knows is that what you do, what works in one setting does not always translate directly into success in another setting.

So we are actively seeking proposals that seek to replicate prior efficacy trials with different populations of learners in different context and different teachers.

Again, the focus here is really on testing that causal question and experimental and quasi experimental research is preferred. Again, I'm going to talk about this in greater detail.

Slide Twenty-six:

The dollar amounts associated with Efficacy and Replication are \$250,000 to \$750,000 per year total costs and for Efficacy and Replication studies you can request up to four years of funding.

Slide Twenty-seven:

Under Goal Four, our Scale up Evaluation Goal, the purpose of this Goal is to test the impact of interventions implemented at scale. Again, the difference between Efficacy and Scale up is really a matter of size and it's also a matter of distance from the developer.

Under Efficacy and Replication, the developer can be involved in providing professional development support to the teachers, being in the classrooms more regularly, to make sure that the intervention is being implemented as desired; whereas, under Scale Up, we are really interested in supporting evaluations when interventions are being implemented by practitioners, not by researchers. The idea here is to test the causal effects of an intervention in as close to a typical delivery setting as possible. As, under efficacy studies, using randomized assignment to treatment and comparison conditions is strongly preferred.

Slide Twenty-eight:

For Scale ups, the typical range of awards is from \$500,000 to \$1.2 million per year and you can request up to five years of funding to support a scale up effort.

Slide Twenty-nine:

Finally, our Measurement Goal topic is focused on developing and testing assessments or other measurement tools. Again, I want to remind everyone on the phone that the types of measurement tools that can be developed do vary as a function of your topic. So the types of tools that can be developed under Education Policy, Finance and Systems, for example, are quite different from the other goals. Just keep that under advisement as it were.

You can request up to four years of funding to complete the test development, construct of validity, all the validity tests that need to be done, and reliability tests. You can request between \$150,000 to \$400,000 per year, again, for up to 4 years.

Slide Thirty:

You've determined eligibility, topic, and now you need to select your Goal. So you need to make a decision about which is the Goal that reflects the research that you wish to complete. Again, please go back and read the Request for Applications. It's a long document, but there's a tremendous amount of information in it. And when you read through, start to think about which Goal is appropriate for the questions you want to answer.

Slide Thirty-one:

So here for the individual who asked about this question earlier, what if my program is between goals? You need to pick one. Again, read the RFA. Don't just go for the largest amount of money. Sometimes we see proposals where it looks like, say, someone chose

an Efficacy Goal because there's additional money that's available under Efficacy when they still really had quite a lot of development work that needed to be done.

So, again, think about you are needing to do and remember that our financial, how do we say this, limits, if you were, are not actual limits. They're just typical ranges. So if you need to develop and you need additional funding, you can request that.

Break the project down into smaller pieces. One of the other things that needs to be considered is that the project that you often will have a large vision of your research project that may encompass all of these components. When you're putting in a proposal for funding, it's important to focus on one aspect of that project because one of the things reviewers want to know is whether the proposal will actually be able to deliver what it promises.

I've certainly had experience with proposals that promised to do a Goal One, Two and Three project in the space of 3 years. Those projects are very unlikely to succeed and reviewers will not recommend projects like that for funding. So focus your project.

I have a Goal Two question. It says here, "Should the intervention be limited to one or could there be more than one intervention?" You know, I'm hesitating because I could conceive of ways where you could be proposing to develop multiple interventions that are targeting a particular outcome or a particular type of learner.

I will say that generally our development projects typically focus on developing a single intervention and you might propose to develop components or other aspects of the intervention that target particular types of learners.

In my Reading and Writing portfolio, for example, you may be developing a vocabulary intervention that's targeted for all learners in the classroom, but there may be, say, a booster component or an additional component for English language learners. So I would recommend talking with your program officer to see whether they think the two interventions you're proposing to develop are distinct enough that it's two separate proposals.

Slide Thirty-two:

I'm going to continue on for right now and come back to a question that's there. All right. So next step. When you are putting your proposal together, we need to think about personnel. All right. So we've decided I'm just going to rehash here. You've decided on a research topic. You've determined that you're eligible. You've selected a Goal. I think the next thing to consider is to think about who are the people who need to be involved in your project. So you need to think about the type of expertise that is needed to carry out the project. Again, as you probably have noticed, the different goals actually have different kinds of requirements.

Slide Thirty-three:

So one of the things that reviewers want to see and one of the things that you as an applicant probably want to also see is a good team.

Slide Thirty-four:

Who is on a good team? Part of it depends upon your Goal. So if you're developing a Measurement proposal, you probably want to have someone with psychometric

experience. However, if you're doing an Identification Goal, you may not need a psychometrician because you're not developing a tool.

You need to consider if you're the PI of the project and you're thinking about putting your proposal together, you need to think about your own training and experience and how that matches with the intent, right, the purpose, of the Goal and the purpose of your project. You also need to make sure that whoever is on your team has sufficient time to commit to the project in order to competently implement the proposed research.

Some individuals may think that having someone who has a big name, right, having them involved as a consultant or an advisor or even a co PI may be all that you need to make a proposal funded. But I want to warn you that reviewers pay attention to how much time individuals have, and if there is someone who is well-known who is on a project but is not proposing to commit a substantial amount of time to that project, that will be looked upon negatively, right, because you're not. They don't think it's. You're not going to get the time that you need from that highly experienced investigator to actually do the work you proposed.

Another question that we often get when we think about preparing who should be on your team has to do with what if you're relatively junior and you don't have the track record with large projects and grants.

Slide Thirty-five:

A challenge for a young investigator is to convince reviewers that you and your team have the skills and experience to implement well what you have proposed. I think it is true that for most young investigators it is important to put together a team of researchers who can provide the support to do the work you need to do.

Now certainly there are many young investigators who bring a lot of really strong skills to proposals, and you need to spend time in the personnel section of your narrative you need to elaborate what the skills are that you bring. I think it's often important for a junior investigator or a young investigator to have a small advisory board or a more senior co PI or a set of consultants who can work with you in putting the proposal together and can be there to provide you advice, right, as you carry out your work.

The other thing that a young investigator needs to do is to demonstrate productivity. So I was talking earlier about how important it is if you have received prior grants or you've written your dissertation to show on your CV that you have been able to complete a research project, do presentations, and then publish the results of that work. So that's one of the ways that you can demonstrate productivity for the reviewer.

I have a question here that says, "Is a PhD required of the PI?" In general, it's not explicit requirement, but I will say that most of our PIs are doctoral level. The research that we support is not predoctoral in general. I'm trying to think whether there is any Does special ed have any different requirements? No. It's the same. All right.

"Can an advisory board be named as part of the personnel in that format?" I think if you're thinking about the personnel section of the narrative and whether you should talk about the composition of the advisory board as part of the personnel, you can absolutely do that. You also want to make sure for an advisory board that you include letters of agreement from the individuals who have decided to be part of your advisory board. All right. I'll talk some more about the personnel section as well.

Slide Thirty-six:

All right. So I think perhaps you all think I'm being a little redundant here. So what do you do now? Go back. Read the RFA one more time and confirm that your idea fits with the requirements for a specific topic and a specific Goal. Then I do want to encourage you to contact the appropriate program officer and discuss your project with him or her.

All of us are doctoral level individuals here on the staff and we all have experience in running our own research programs outside of our work here at the Institute. We can provide you with guidance. We can provide you with an external perspective on the work you're proposing and hopefully provide you with good guidance in terms of developing a competitive proposal.

I see this question here. "How do we know who our program officer is?" Again, if you go, if you read the RFA, the program officers are listed at the very end of the RFA. You can also go onto our webpages and you can select the Projects and Programs area and there are program contacts listed for each of the topic areas. We are generally organized by topic areas. So that's how you will find the appropriate program officer.

"How is a local school district included in the personnel section for the school district program evaluation?" I assume this question has to do with the evaluation of school district policies, the other RFA, and I don't know the requirements for that one. But generally school district information and participation of the school district is part of the resources section of the narrative and should be discussed in the resources section and any letters of agreement from schools or districts should be included in appendix A.

Another question, "What's the average number of staff in a proposal?" I think that that question really varies as a function of the Goal. For a Goal One project, if you're proposing simply to do a secondary data analysis, you may have a very small staff. It may be you as the Principal Investigator, then perhaps a statistical consultant and maybe a content consultant.

If your Identification project involved original data collection, you probably are going to include some graduate research assistants. You may have an advisory board. You may have teachers involved in the project as well. The largest projects that we fund are the Scale up Evaluation projects, and those typically have substantially larger staff, often because the scale up projects involve evaluations that are occurring in multiple, geographically distinct settings. So you need individuals in each of the settings.

Slide Thirty-seven:

All right. It looks like those are the questions that I have around that. So now I'm going to talk in greater detail about, here is the recap: preparing the proposal. And I'm going to talk in detail about each of the the content that needs to be included in each of the sections of the narrative. So I'm going to step through that with you all. There's the recap.

Slide Thirty-eight:

Now what do we need to do? The first thing, when you put together a proposal, one of the most important things to do is to make sure you include everything. What you do not want to happen is to put together a proposal and upload the proposal into grants.gov and think you had everything there and then discover you're missing a section and have your proposal return to you without review for being noncompliant.

So I believe there is a checklist in the application instructions, and I would encourage using that checklist to make sure you've included everything that you need to when you're uploading a proposal.

Slide Thirty-nine:

So what do you need to include? The first is that you need to include the cover sheet.

Since this is a government wide sheet that is currently used, cover sheet, it's the fillable form that is on grants.gov. And it includes information about who the PI is, who is your administrative contact within the university, the title of the project.

There are instructions about what you need to include in terms of specifying topic and goals. You need to read those directions carefully because in order to make sure that your proposal is reviewed by the correct panels and in relationship to the requirements of the correct Goals, you need to specify that on your cover sheet.

You need to complete a budget form. You need to include a one page summary or abstract of your proposal. And then you need to include the content.

Slide Forty:

And so here is what goes in. Here is sort of the meat, if you will, of the proposal.

The project narrative needs to be included. That's 25 pages, single spaced. You need to include a separate bibliography and/or references cited that are in the project narrative. You need to include four page biographical sketches of all the key project personnel.

You should include a narrative budget justification. And then you should include any sub-award budgets and their associated narrative budget justifications as well. So if you have a sub-award to another university or to a small business or to, say, an international partner, that information also needs to be included.

Slide Forty-one:

We also have the opportunity to include two appendices. So under appendix A, you have an additional 15 pages to include letters of agreement, any tables or figures that are referred to in the project narratives themselves.

If there's anyone on the call who is proposing to resubmit an application, the first three pages of appendix A can also be used to have responses to the reviewers.

We also have 10 pages in appendix B that you can use to include sample curriculum materials for, say, if you had a scope and sequence or if you have sample measurement tools. Say if you're proposing to develop a measure and you already have some items that you have developed, you can include that type of accessory material in appendix B.

And, finally, if you are recommended for funding, there are additional forms that you will be asked to complete at the time that you are recommended for funding.

I have a question here that says, "Is it okay to have a co PI?" Absolutely. In fact, you can have more than one co PI. And I think that the vast majority of the projects that I see do have co PIs listed.

Sorry. Questions here. "So we can put all tables and figures in appendix A and only text in those 25 pages?" Yes, you can. I would recommend that you refer, make

sure you explicitly refer, the reviewers to appendix A and tell them the location of your tables and figures. But absolutely, you can do that.

"For the biographical sketch, is there a specific form or can we construct it ourselves using the RFA and the application package instructions?" We do not have a specific form. And so you can construct, you know, put together a biographical sketch that makes sense given the skills that you want to bring.

I think it can be very helpful if you include in your biographical sketches brief paragraphs which describe the skills that individuals bring to the project and sort of target their skills for the reviewers.

"Is it absolutely necessary to respond to reviewers from a previous submission? What are the advantages and disadvantages to doing this?" I think that this is something that I would recommend you talk specifically with the program officer who is in your competition for specific guidance in this matter.

In general, I think that it is very helpful for you to respond to the reviewers. It doesn't have to be a narrative. You can say, "We have addressed this concern of the reviewers on this page of the revised proposal."

But particularly if the proposal went to panel review, the panel members will remember that the proposal was discussed. And I think it is a disadvantage if you do not respond to reviewers' comments simply because then the panel members will try to remember what they said and what was talked about previously.

"Is there a limit on how many co PIs are allowed?" There is not. I think that there is probably a budgetary limit in terms of how many individuals you can afford to pay as a co PI. If someone is going to be named the Co principal investigator, there is an expectation that they will be devoting a substantial amount of time to the project.

"Is it appropriate for only one co PI to be at the doctoral level?" You know, I think that the answer to that question really depends upon what proposal you're putting together.

So, for example, under a development project, you may have as a co PI someone who has a lot of experience in curriculum development. And that person may not be at the doctoral level. And, yet, they bring a very, very targeted set of skills that are critical to the development project itself. So I think that the answer to that really depends.

"Did the same reviewers review the resubmitted proposal in case it did not go to panel review?" Our Standards and Review Office does attempt to send their proposals to the same reviewers to the degree that that is possible.

We have standing review panels. However, individuals who are named for a first three year term are now rotating off. So it may be the case that your proposal cannot be reviewed by the same reviewers because that reviewer is no longer reviewing.

I don't know if that makes sense, but to the degree we can do it, we certainly make every effort to have the same reviewers read the proposal the second or third time it would be resubmitted.

Slide Forty-two:

All right. I think let's continue. Oh, someone was asking about the sample budget question. So here are some of the major categories that we typically see in a budget.

So often the bulk of the cost for a proposal will go to personnel. And so personnel typically will involve Principal Investigators, any co Principal Investigators,

other key personnel, so if you have a statistician or a psychometrician who is part of the proposal. Perhaps you will support a project director who is working half time or even full time on the project, making sure things are running smoothly. You can include in personnel maybe graduate research assistants or postdoctoral assistants as well.

Fringe benefits are also included. And your university or if you're working at a not for profit research foundation, your business office will help you with that piece.

You can request support for travel. And we see two different types of travel here. Typically we'll see travel to conferences to present the results of the research that you have been conducting. You can also request support for travel to the sites. If there are sites that you need to go to in order to collect your data, you can, of course, ask for funds to support that as well.

You can also make requests to purchase equipment and/or supplies. I want to note here that different institutions have different rules about what counts as equipment and supplies. Go by your university or your research institution's rules in terms of this, but you can request the purchase of computers or video cameras or tape recording equipment, any of those sorts of things.

The contractual section is typically the sub-awards. So if you have sub-awards to other institutions, that would be included in the contractual section.

And under "Other," that can include a whole range of different things. So if you're at a university of you have graduate assistants who are working with you, tuition remission is often part of their compensation. That's usually included in the "Other" category.

If you're planning to provide incentives to participating students or teachers, that would go under the "Other" category.

And, finally, there is a section for you to include your indirect costs. The Institute in terms of indirect cost rates I'm thinking about the right way to frame this you can ask for your research indirect cost rates.

Institutions often have two forms of indirect costs. They have an on campus and an off campus indirect cost rate. Depending upon the type of research that you're proposing, you can request to have part of that, part of your budget, only charge the off campus rate so that you're doing all of your work off-site. But you need to talk about that with your sponsored projects office.

"Where do you include consultants: under personnel or under contractual?" You don't generally see consultants under personnel because you are not going to be paying fringe benefits.

So one of the ways to think about this is that the personnel category is really an employee of the institution where you're working. And so they would then get fringe benefits. So consultants are typically seen under contractual or sometimes under the other category.

"Can travel include PI meetings if we are far apart?" Yes, absolutely, you can definitely include that as well. I'm sorry. That was an oversight on my part.

"Can a proposal extend a previous grant to collect additional years of data for another goal? Does the previous PI need to be on the current grant?" I think that's okay. I'm hesitating because I think I need more information to answer that question correctly. And perhaps that's a conversation we should have.

But there is nothing that would preclude you from proposing to continue a project that is currently underway with other support. And certainly we have projects that draw support from different agencies as well.

The restriction, the federal restriction, is that you cannot ask for funding to support work that is already being supported under another award. You can't pay for the same thing twice.

"Is there a cap on the consultant fees?" IES does not have a cap on the consultant fee. However, if your consultant fees are going to be high, those that are over, say, \$500 a day, you will need to explain in your narrative budget justification why, right? So what's the reason? If that's the person's standard fee, there just needs to be an explanation as to why it is high.

Isn't there a percentage of time that has to be off-campus indirect for development? Yes. And the trick here is that different institutions have different indirect cost agreements. And it is the institution's indirect cost agreement that takes the lead here.

So the Department does not have, we don't have, a say in terms of the different percentages that institutions will allow you to charge to indirect cost rates.

So in general, people do work off-campus, but you need to talk with your sponsored projects office about what inappropriate division of on- and off-campus indirect cost rates would be.

"Will my proposal compete with other proposals submitted under the same Goal or under the same topic?" In many ways proposals don't compete with each other.

Proposals are reviewed relative to the Request for Applications and the requirements that are specified under that Request for Applications. So I am going to answer the question in a couple of different ways to see if I get what you're concerned about.

The reviewers are directed to review a proposal against Goal and topic. So if you're putting in a Read/Write development project, the reviewers are to review your proposal against the requirements specified in the RFA for Read/Write development projects.

The way our panels are organized, our review panels are organized, by topic. So we have a Reading and Writing panel. We have a Math and Science panel. We have a Special Education panel. We have an Early Childhood panel. And those panels will review proposals submitted across topics that are relevant to that area.

So, for example, the Reading and Writing panel reviews Reading and Writing proposals; Special Education Reading, Writing, and Language Development proposals; the Teacher Quality Reading and Writing proposals; the Interventions for Struggling Adolescent and Adult Readers and Writers proposals. I hope that answers your question.

Slide Forty-three:

All right. I think the next section now is we're going to start to sort of dive more deeply into the content of the project narrative because, of course, this is what the Principal Investigators who are on the phone are spending the most time thinking about, I hope.

Slide Forty-four:

So again I want to remind you all that I am really only talking about the education research Requests for Applications, both within NCER and NCSEER.

These four categories, these four sections of the project narrative, are I'm hesitating only within those research RFAs. There are different components in the training grants. There are different components in the center grants. So be aware that what I'm talking about here is really focused on the research grants program.

Reviewers are asked to review your proposal along these four dimensions. And so when you put together your project narrative, you want to make sure that you have four sections which are labeled in each of these four areas.

So you are to identify and describe the significance of the project you are proposing. You are to elaborate the research plan. You are to describe the personnel who will be working on the project. And you need to elaborate what resources you have to support the work that you're proposing to do.

All of this information is part of the 25 page project narrative. Clearly information that's included in the biographical sketches, in the narrative budget justification, in appendix A and appendix B support the argument that you put forth in the project narrative. But it is very important that you address each of these areas in the project narrative itself. All right?

Slide Forty-five:

So for significance, you need to read the Request for Applications for each of the different topics and Goals because the information that is required to address the significance of the project depends on the research Goal. I will say, however, that across almost all of the Goals, the significance should reflect the theoretical foundation of the work you are proposing to do.

So what do we know about, say, the potentially malleable factor that you're seeking to identify under an Identification Goal? What do we know about the underlying constructs that are supporting the development of your measurement?

For Efficacy and Scale up, theory is also important, but it may be less important, depending upon the type of intervention that you're proposing to evaluate because clearly this criterion of why use of an intervention that is already developed in some ways makes it difficult for you to lay out a theoretical rationale for the intervention. Theory is also very important for the Development projects. But go back and read the RFA and make sure that you understand what the requirements are for significance for your particular Goal.

Slide Forty-six:

So, similarly for the research plan, go back, read the RFA. But I am going to spend some time now talking about the different expectations that are laid out in the RFA for research plans for each of the different Goals.

Slide Forty-seven:

So under Goal One, what are the things that you need to be thinking about and making sure that you include in an identification or exploration project, right, a Goal One project?

Slide Forty-eight:

If you are planning to complete a secondary data analysis, here are the things that you need to make sure are in your proposal. You need to define and talk about the dataset that you are going to use. It can be a local dataset, a district dataset, a state dataset, a national dataset. It could also be a dataset that you already have collected.

So perhaps you have a longitudinal dataset that you have been part of and that already exists. You need to take the time in your proposal to explain the characteristics of the dataset well.

One of the things that can happen is that you know the dataset inside and out, but your reviewers don't necessarily know the dataset that well, even if it's a dataset that is, say, a NAEP (National Assessment of Educational Progress) dataset or another NCES dataset.

Make sure you take the time to explain to the reviewers what is available in the dataset. You know, what items can you use? What categories of information are there?

The other critical part of putting together your research plan is that you have got to provide sufficient detail as to the statistical and analytic plans you will use to draw conclusions. So maybe you are going to need to construct one or two variables that look say maybe it's parental involvement in the school and you need to construct a variable from the dataset.

Make sure you tell the reviewers how you are going to do that. What are the actual questions that you're going to integrate? How are you going to do that if they're not on the same scale. What are you going to do? Lay it out for them.

You should also describe the analytic plans you have to analyze the data once you have created a file that makes sense. So are you going to use hierarchical linear modeling? If you have a model that you know you're going to run, include that model. Are you using SEM (Structural Equation Modeling)? What are your techniques?

The other thing to note is that you can propose to do a secondary data analysis to identify a characteristic of an instructional practice. And then you could propose to spend one or two years observing the ways in which that sort of identified factor what it looks like in school, what it actually looks like in the classroom.

You don't have to only do secondary data analysis or only do primary data collection. You can actually propose to do both. But they need to be related to each other and linked.

Slide Forty-nine:

If you propose to collect primary data, you need to clearly describe the sample, who are the students, the teachers, the principals, whomever you're working with: who are they?

I think it's important for you to think long and hard about who an appropriate sample is to gather information from. So you should be thinking, what is the intervention that I am going to be developing? What is this going to be targeting? What should it look like?

And you need to make sure that the sample that you do this primary data collection with makes sense in terms of your ultimate goal, in terms of the intervention you are developing.

So if you are planning to work with struggling adolescent readers in a rural context, then your primary data collection in an Identification Goal should match that sample.

You also need to spend sufficient time in the research plan explaining the measures and how the data will be coded so that the reviewers can understand how the measures and the hypotheses are related to one another.

So often the proposals we see for Identification involve a fairly detailed observational protocol. You're going to be in classrooms. You're going to be watching teachers and students. You're going to be collecting information about what is happening in the classroom.

You need to explain, what does your observation system look like? Are you doing time sampling? What is your process for getting inter observer reliability? All of that information needs to be specified in the proposal.

You also need to be collecting some form of student outcome data. This could be something you know, it could be end of year tests. It could be end of unit tests. But you need to explain what student data you are collecting that you are planning to associate with the variations you see in instructional practices.

And, again, make sure you provide detailed statistical and analytic plans. The goal here, what reviewers are trying to figure out is whether the proposal they're trying to figure out what you're going to do. And just saying, "I'm going to collect this observational data. And I'm going to code it" is not sufficient. So you need to provide as much detail as you are able to.

Slide Fifty:

For the third type of possible project under Identification, you can propose to complete a meta-analysis of prior work. In order to put together a competitive meta-analysis proposal, you need to clearly describe what are the criteria you are going to use for including studies and the rationale for selecting the studies that you have.

What are your search procedures? So if you are going to be looking in PsychInfo and EBSCO, what are the words you are going to use? Are you going to use a Boolean criterion? What are your criteria? Make it clear.

Again, you need to elaborate your coding scheme and any procedures that you are going to use for extracting data from the studies themselves. And you need to describe what are your procedures for ensuring reliability of coding.

You need to look at at least a preliminary search because you need to demonstrate that there is a sufficient number of studies that are available for you to complete the work that you are proposing to do. All right?

So if you are going to do a meta-analysis and you do a first preliminary search of the literature and you only come up with two or three studies, then a meta-analysis is probably not an appropriate technique for you to use for answering your Identification questions.

And, finally, I feel a little redundant here, but please provide detailed statistical and analytic plans. And for meta-analysis, it will be important to include your definition: how are you defining your effect size statistics, since that will drive the conclusions that you're drawing?

I'm going to pause here just for a second. Does anyone have any questions about designing Identification projects? Okay. This is a general question I'm going to answer. I'm trying to keep the general questions to the end, but I will go ahead and answer this one right now.

It says here, "Over the past few years, we have seen some terms become taboo. For example, whole language was deleted from the vocabulary. Are there topics or approaches that will automatically be rejected?"

I think the answer is no, right? We're not going to say this keyword, we can't fund any work that's looking at whole language. What I would recommend, though, is that you need to be sensitive to the current state of the literature and the current state of the research questions that are being posed more broadly.

The reviewers we have are fellow researchers. They are your peers. And so they're clearly aware of the conversations that have been ongoing over the past decade, 20 30 years.

So if you want to include a project that is looking at something that you think is considered taboo, you need to spend the time justifying why this particular approach would be theoretically important at this particular time in our understanding of instruction.

All right? Any other questions about Identification? All right. I'm sure people will think of things as I am talking. So please go ahead and send them.

All right. I have another question here that says, "I received an e mail encouraging proposals using NAEP. I wonder if there is a set aside funding for proposals using the NAEP?"

I am not aware of a set aside for NAEP funding. The way that the research budget of the Institute of Education Sciences is organized, we have a general research budget that applies across all topics and all goals. So I don't believe that NCES has a different set of dollars that they are using for the NAEP.

Slide Fifty-one:

All right. Now here is my favorite topic. And I'm sure that there are many of you on the phone who have been thinking about Development projects.

For those of you who have been paying attention to the development of the IES RFAs over the past few years, you will note that the Development requirements change from year to year. This provides challenges, both for individuals putting in proposals or applicants putting in proposals as well as for reviewers.

So if you are proposing to put in a Development project, if it's a resubmission from last year or from any prior years, again, please go back and reread the Request for Applications.

Slide Fifty-two:

The over arching purpose of the Development Goal is to have at the end of your Development project a fully developed intervention that would be ready to be tested in an efficacy study.

So this means you need to have all of your materials developed, right, student materials, professional development materials. If you want to have a teacher manual, if

there are observational tools that should be used along with the intervention, whatever is necessary for it to be tested.

Now that I've said that, I want to also remind you that we do not require that Development projects only focus on year long curricula. So you could propose to develop a unit.

So perhaps you're interested in science education and you would like to develop a force-in-motion unit for use with fifth graders. That is perfectly fine. But you need to just specify in your proposal "Here is what I am doing. And here is what I hope to have by the end."

We request that you propose to collect pilot data on the feasibility of implementing the intervention in schools. This criteria of feasibility is important.

And I think, as I mentioned earlier, one of the difficulties with development work can be that you spend all this time developing an intervention in a laboratory context or a closed context and there may not have been enough systematic attention to testing this in school settings.

So we want to make sure that you explicitly build into your development process time with teachers, time within classrooms with the intervention being tried out.

Finally, the fiscal '09 Development project includes a request for gathering pilot data on the promise of the intervention for generating desired outcomes.

This should be on a small scale. It can be only pre post data. It does not need to involve comparison data. But the idea here is that you want to gather some information that informs your decision that this is actually operating as you intended for it to operate, right, that kids are improving or teachers are learning more or whatever or maybe kids' negative behavior is being reduced, whatever the outcome is that you're really targeting with this intervention.

Slide Fifty-three:

In developing the research narrative, you need to spend time talking about the "why question" because this is really a significant question. So why develop this intervention?

You need to make sure you talk about the context. So make it clear to your reviewers what are the attributes of existing practice. So don't assume that your reviewer knows everything about the way instruction in this area currently looks like, what it looks like. Take time to elaborate the context.

There was an adult literacy question earlier about vocational education. I think there's a case where it's very important that you set the context well because you cannot assume that reviewers are going to know well what adult literacy programs currently look like.

You need to specify the shortcomings, right? Why do you think this isn't working? What do we know about what is not happening in terms of what people are learning?

And clarify the problem that you in this proposal are going to attack. So we certainly know that there are big problems, right? We have adolescents who can't read. That's a very large problem. But what is the specific problem within adolescent reading that your particular intervention will address?

I think that to the degree you can specify that and specify the theoretical reasons why you think what you are developing will address that problem or that question that will really help the reviewers understand the scope of work that you're proposing.

Slide Fifty-four:

You need to, as part of this, spend time describing the proposed intervention. There are lots of phone conversations with individuals who say, "Well, I don't know what it's going to look like." And that is true. You don't know the final details of the proposed intervention.

I'm willing to wager that most of you out there who are planning to develop an intervention have a pretty good idea of what you think it should look like, at least at this point. And I think that to the degree you can flesh out where you think you are going, it helps the reviewers understand the context.

Now, you need to also be clear that this is a vision and not a reality. So you don't want to describe so much of the intervention that reviewers go, "Well, it sounds like this is already developed."

So there's a kind of a balance that you need to think about here. But you have to help the reviewers imagine, if you will, envision what this intervention is going to look like and what it is going to look like in classrooms being used with learners, who are your target population.

If appropriate, you should certainly describe what are the components or the features of an intervention. You should talk about who is going to implement it or use it.

Is it a computer program that has artificial intelligence where the kids are going to do homework practice on it? Is a teacher going to be implementing it? Is a para educator going to be implementing it? Who is the target population?

And then how is it going to be used? Is it a core curricular component? Is it a supplementary component? Is it something that kids can use in an afterschool setting or for homework? Elaborate that as well.

You also need to spend time talking about the practical importance of the proposed intervention. What is the problem that is going to be addressed with this intervention? And why is what you are developing of practical importance, right?

You know, if you think this intervention is only going to move students a small amount on their academic achievement, then it may not be terribly important from a school practitioner's perspective.

Slide Fifty-five:

I see some questions here. I am going to finish the section, and I will come back and answer them. Why develop this intervention, again this why question? Again, this is part of your significance and your research plan.

You need to elaborate your theory of change. So one of the things that I want to encourage all applicants who are proposing to develop interventions is to think long and hard about their understanding of the theory of change.

So what is the causal chain of events that you believe happens to lead from the implementation of the intervention in the education delivery context to the desired outcome?

So one of the reasons this becomes important is that this will lay out what the intervention should look like, what are the measurement requirements, right, as you're thinking about what are you going to need to measure for change, both in the context of development but also looking forward to efficacy.

And then what are the final outcomes you're going to see, right? What are your rationales? Think about your theory. Think about what prior research has been done in this area.

So, for example, if you're going to be addressing adolescent literacy, you need to make it clear that you have thought and are aware of the prior theoretical literature as well as whatever empirical literature exists in the area you're focusing on. And, again, make it clear to the reviewers how what you are proposing to do addresses the shortcomings of current practice.

Slide Fifty-six:

So, to reiterate, what you want to include in the research plan after you answer the why questions is you want to talk about what will be developed. You want to talk about the how. Make sure that the reviewers understand the process.

So how is it going to be developed? Are you going to get a small group of teachers together? And are you going to sit down and work with them and develop materials?

Are you going to bring in kids to provide feedback about important content? Are you going to develop a little segment of it and test it in a classroom and then come back and revise and develop a second part and bring it into the classroom? Make it very clear as to how.

And then you need to elaborate how will the intervention or the components be tested to see if it operates as intended. We are really encouraging individuals to make clear the iterative process. We're expecting that testing will have to happen over multiple time periods.

So if you're developing a longer program, it probably makes sense for you to plan to test small pieces of it over the course of the initial year or two of the project to see if, say, the weekly story read aloud is actually working as you intended. And then you can develop the vocabulary booster component. You can check that. Think about how that is going to work logically.

Slide Fifty-seven:

You need to spend time defining what for you means "operating as intended." Part of the reason this is really important is that it helps the reviewers understand what your criteria are to answering this question, right?

So if operating as intended means things like the students are all paying attention, if it means that it's going to take place in three 15 minute segments of instruction, you need to elaborate what that means for you.

And it should correspond with your description of this area of change.

Slide Fifty-eight:

Specify what data you're collecting to determine how it is operating.

So I think I talked earlier about the importance in identification of describing the observational protocol you are going to use. You are often going to see the use of process and observational data in Development goals as well.

What data are you going to be collecting? Are you going to give the teacher a script? And is your operating as intended going to be the degree to which the teacher follows the script or are you going to give the teachers an open ended set of materials? And what, then, would be your definition of operating as intended?

What kind of feedback do you want to get from users? Are you going to have a questionnaire that you're going to use? Is the questionnaire going to be the same for the students, for the teachers?

And then specify how the data are going to be coded. What are you looking for, right? For things like, how long did it take for the intervention to be implemented, that is pretty easy to specify. But there may be other things that are more subtle and not immediately obvious that you need to really make clear to the reviewers what you are doing.

Here. Let me look back here. I have two questions about operating as intended. "How is operating as intended different from fidelity of treatment? And is operating as intended testing the same or different as the pilot testing described earlier?"

I think that operating as intended has a lot of overlap with fidelity of treatment. And one of the important things to think about as you're proposing to put in the development intervention is that understanding well how operating as intended is defined should lead you to be developing measures that could then be used as fidelity measures in an efficacy trial. So it's part of a continuum.

The second question about this is, is operating as intended testing the same or different as the pilot testing described earlier? I think that sort of we have these two uses of pilot testing. And I apologize if it's confusing.

I think that the operating as intended is both. So it's the feasibility data that we talked about, feasibility/usability data, where you're involved in this iterative process and you're trying to make sure that teachers can actually do what you're asking them to do with the interventions. And then you're also going to be gathering, if you do pilot data, collect pilot data with student outcomes, operating as intended will be defined in relationship to what the student outcomes are that you're going to be collecting. These are questions to really again talk to your program officer about.

I also noticed earlier, "does the 25 percent limitation on gathering pilot data in Goal Two projects apply to both types of pilot data collection?" It really only refers to the student outcomes piece, where you're trying to see an association between the intervention that's being delivered and student outcomes in a systematic way. So it does not apply to that feasibility/usability component.

So here is a question. This is sort of a technical question. It says, "My apology if I missed the Q&A on this. Based on the narrative limit, is it appropriate to concisely describe something in the narrative and then reference a table or a one- to two page detailed description as an attachment? If so, should each attachment be labeled as a separate appendix?"

There are only two appendices that are permitted: an appendix A and an appendix B. Those appendices should not include narrative information.

So if, for example, you want to put together a table of the measures that you are going to be collecting to determine how the intervention is operating, you can do that. But I will recommend that if it is something you think is really critical for the reviewers to know, you want to make sure it is well described in the narrative.

“In a prior proposal, a reviewer stated that a theoretical foundation was not based on scholarly research conducted by known scholars. For example, a reference cited was work done by the Gates Foundation. Are references limited to academic scholarly research?”

You know, this is an interesting question. And I think, again, I am going to refer you back to your program officers so they can look at your proposal and look at the reviewer comments and give you more nuanced feedback, but the difficulty here may be that the work cited done by the Gates Foundation is not work that is familiar to the reviewer. And in that case what you need to do is elaborate what the actual research was.

So it may be that there is concern here that what you're citing is a secondary reference, where it's a collection of research, you're reporting on a collection of prior research and not the original research. But, again, please talk to your program officer.

And, finally, under teacher quality, there is reading and writing and math and science. If the intervention with teachers is of the nature that it cuts across all curricular areas, is it necessary to pick only one of these two areas? Indeed, it is.

Now, the other thing that you need to think about is that we do support research looking at, say, teacher cognition under the Cognition and Student Learning RFA. And so depending upon the type of work that you're proposing, if it's crosscutting like that, then it may be appropriate for you to think about a teacher quality RFA.

Okay. In terms of Goal Two, we have a question here thinking about the fact that teachers need time to change their practices and that practicality and usability for teachers initially may be watering down powerful interventions. There may be low fidelity of treatment. So Goal Two is not focused on quick and easy fixes.

Will reviewers realize that practicality and usability need to be balanced by intended impacts on kids' learning? I think that this is an interesting question, and it's something that sort of you as the applicant, the burden is on you to describe the dilemma to the reviewers so that they understand what constraints you're operating under.

And certainly it is true that some interventions are very difficult for teachers to get up to speed on. But one of the things that you could propose to collect over a development process is the amount of time that a teacher would need to have experience with a curriculum in order for them to be able to deliver it as intended.

So, again, I think that this is something that bears further discussion. But I think that is one way to think about that question.

And let's see. We have another question here, which says, "For Development projects, is IRB approval a common expectation?" You do not need to have IRB approval in hand prior to submission. However, if you are recommended for funding, you will need to have IRB approval in hand prior to the award being made, I mean, if you are planning to do any kind of research that is going to require work with people. And I think that just about everything that we do here tends to involve that kind of work. So I guess the answer is yes, but it doesn't have to be done prior to submission.

Slide Fifty-nine:

All right. So here. Let's just see. I want to pay attention to my time here. All right. So let's kind of move on. I want to make sure we talk about the other Goals.

So make sure that you define operating as intended. Make sure you specify what data will be collected to determine how the intervention is operating. And make sure you explain how the data you are planning to collect are then going to be used to feed back into any revisions that you're planning to make of the intervention.

Slide Sixty:

People often ask me, "How many iterations do I need to do?" It really depends upon the complexity of the intervention being developed and how you think it will be implemented.

Slide Sixty-one:

Feasibility. In the context of feasibility, you need to demonstrate that the intervention can be implemented with fidelity. So this answers some of the questions earlier, right?

So you need to again make sure that you are testing the intervention, doing the pilot testing or any preliminary testing, in settings that represent the type of settings for which the intervention is intended.

If you're planning to work with struggling adolescent readers, please don't test your intervention with kids who are doing just fine because then you're not going to know whether, in fact, the intervention is feasible to implement with the students or the population you're planning for it to work with.

Slide Sixty-two:

What is the promise? So for this pilot data component, right, you need to look at the promise of the intervention. And here in this last part, the part where there is only 25 percent of the budget that can be used to answer this question, is, does performance on the outcome measures and generally this can be student outcome measures, but it could also involve teacher measures if it's a teacher quality proposal is it moving in the appropriate direction?

And you need to explicitly examine whether implementation of the intervention is associated with changes in activities and behaviors that are consistent with the theory of change.

So, again, the theory of change that you describe should really inform the whole narrative chain, as it were, that you described in terms of the data you're collecting, in terms of iteration, in terms of the outcomes that you're planning on collecting.

Slide Sixty-three:

All right. I think we've talked a long time about development. And I want to make sure we talk about some of the other Goals as well.

So when you're thinking about designing Efficacy and Replication projects or Scale up Evaluation, you need to know that the goal is similar and the research requirements are almost identical for both of these Goals.

So here the goal is under Efficacy and Replication -- the goal is to determine whether or not fully developed interventions, programs, practices, and policies, are effective. You're asking a causal question. What works?

Now, for Efficacy and Replication projects, generally the developer is permitted to be involved to some degree in efficacy studies. And the idea here is that you are testing the efficacy of the project under the best of all possible circumstances.

So you're going to be working with your target population, right? But under specified conditions. And you maybe will be providing you will have graduate students in classes perhaps providing support to teachers. You're going to maybe have meetings outside of school with the teachers once a month.

I mean, there are things that you can do to make sure that the intervention is being implemented with as high fidelity as one could expect.

Slide Sixty-four:

Again, when you're putting your research plan together, particularly when you're describing a fully developed intervention, you are testing a fully developed intervention, make sure you describe the components of the intervention. Don't assume that your reviewers know the intervention well.

Even if you're proposing to test a very well known intervention, take the time to describe the intervention. Use appendix B to include examples of the curricular materials, the scope and sequence. Make sure it's clear to the reviewers what it is that you're proposing to test, to evaluate.

Here you should also take time to describe how this intervention differs from what is typically offered in education settings. One of the questions here, the causal question, is you want to understand what makes this intervention different. You want to know that.

Again, please spend the time to define your sample well. How many kids are participating? How many teachers? How many schools? And so that the reviewers know, whom you are proposing to complete this study with.

Slide Sixty-five:

The expectation: there is a preference for a use of random assignment. Quasi-experimental work is permitted, but you have to explain why it is a necessity.

In terms of the random assignment design, you need to decide what level of randomization is going to be occurring. Are you able to randomize at the level of the students?

I'll just let you know that this doesn't happen very often in schools. We will see student level randomization under efficacy studies.

Much of the randomization in terms of the work we find occurs at the teacher or classroom level. And it can also occur at the school level.

One of the critical things to make very clear in your proposal is how the level of randomization matches with the level of analysis. So you don't want to make a claim that you're randomizing at the school level and you have nine schools that are randomized to treatment or control. I guess ten schools, right? And then do your data analysis and your power analysis on the number of students who are participating in the study. That would be a mismatch. And it would raise concerns from the reviewer's perspective.

So in these projects, it is often good to have a statistician involved if this is not a strength of you who are working as the PI.

Slide Sixty-six:

There is an expectation, a requirement in the RFA, for both the Efficacy and Replication projects and the Scale up projects, that you will use power analysis, power analytic techniques to determine the number of students, teachers, schools that you need to draw conclusions about impact.

There is also a requirement that you include standardized measures of student achievement as one of your outcome measures. They should not be the only measures of student achievement that you include.

When you think about the types of measures that you are going to propose to include, think long and hard about where would you expect to see change.

So, for example, if you're using a textbook or a curriculum, you're going to have unit tests. Those unit tests are going to be, we hope, associated with the intervention.

If you're looking at a standard curriculum I'm just trying to think about how to do this. Say if you're looking at the use of one curriculum, as opposed to standard practice, in the context of a school system, where they have quarterly exams that are countywide, say, or districtwide, then those measures might be appropriate to use.

But think about what we like to call proximal measures, where you might expect to see movement as well as these distal or standardized measures of student achievement.

And there is an expectation that you would attend to the fidelity of implementation in the context of these Efficacy and Replication projects.

So, again, if, in fact, you don't see, maybe you don't see main effects of the intervention. If you have fidelity information, you can ask the question as to whether the ability of teachers to implement the intervention as you intended is associated with improved outcomes or not improved outcomes.

Slide Sixty-seven:

For Scale up, again, we're requesting proposals that are looking at these questions of scale and are answering the question of, does this intervention produce a net positive increase in student learning and achievement relative to the variety of products or practices that are currently available and utilized by schools?

Again, the real distinction here is one of size and that it is implemented without additional support from the developer than what would normally be provided.

Slide Sixty-eight:

To reiterate: all of the methodological requirements that are specified under Efficacy and Replication hold for Scale up Evaluations. Implementation occurs at scale and under typical conditions.

Slide Sixty-nine:

Choosing outcome measures. Here this is just a recap of what I hope I have made clear in my prior discussion. But think long and hard about the outcome measures you are choosing and think about the degree to which they map well onto your theoretical questions.

Make sure you have some standardized achievement tests that are part of your battery. Make sure you have proximal measures, where you can gather some closer change, right, things that are closer to what your intervention is meant to move.

Make sure you think about who is going to be administering all of these measures. Okay? So there are practical considerations you really need to spend some time thinking about.

Slide Seventy:

All right. I want to talk quickly about the Measurement projects. I do want to remind you that I'm not actually going to go into lots of detail about Measurement projects, in part because there is substantial variation across the different topics. But I think it should be, I hope it is clear that across all of the Goals, you need to include the strong theoretical rationale. This is equally true for these Measurement projects.

If you're developing a new measurement tool, why is this necessary? What are the theoretical constructs that you're hoping to test? Why is it important that we have a different tool or a tool to measure this area?

Justify the need. So, again, if it's something that doesn't exist, that's relatively easy to say, "Here is why we need it," so, for example, there are lots of early reading measures. Why do we need another reading measure? What would the reading measure you're proposing to develop do differently from what is currently done?

You need to provide detail in terms of the proposed procedures you're going to use for developing the assessment instrument. Who is going to develop the item? How are you going to determine construct validity and all of the other validity criteria and the reliability criteria that are necessary to be in place for an assessment measure to move forward?

Please note that the Measurement Goal is not designed to support large scale norming project. The dollars are not enough to do that kind of work. We are really hoping to seed some new measurement tools or some modifications.

Say perhaps you have a measurement tool you developed as part of another research project and you'd like to carry out the validity and reliability tests that you need to do so that you can establish the psychometric properties of these instruments so that other individuals and other research teams or other schools could use this.

Slide Seventy-one:

You need to make sure that you take the time to describe the characteristics and size of the samples to be used in each of your studies.

Explain your procedures for collecting data. Again, make sure you have enough money budgeted for buying tests, for administering the measures.

What are your additional measures that you are going to be using to determine validity? And what are your data and analytic strategies going to involve? What are you going to do with all of this information that you're going to get?

Slide Seventy-two:

All right. Now, the last two sections I've got some questions here. "Would a study designed to use existing measurement tools in a new way for screening and progress monitoring fall under Goal Five?"

I believe so. I mean, particularly if there I mean, I would assume here I'm going to make this assumption that part of what you need to do is if you have an existing measurement tool and you want to use it for screening and progress monitoring, maybe you need to develop any new versions so you have version A, version B, version C that need to be able to use them over time. You need to describe what you need to do. So you can certainly build off of existing measurement tools.

Here is a question here. "Is there a need to include a sustainability component for interventions beyond the time period of the grant?"

We do not have any explicit requirements about sustainability. I'm stopping because I'm just thinking in terms of Scale up. I mean, clearly when you think about the practical importance, though I think I've talked about that over a couple of the descriptions, when you talk about the practical importance of an intervention you're developing, part of that may include things like sustainability. We don't have any explicit requirements for testing that.

I am going to go back to look here and see what else there is. "Can a Development Goal include teacher training in the use of curriculum?" Yes.

"Is it appropriate that an SEA (State Education Agency) is the grantee that sub-grants to a university, or would it be more appropriate as a partnership with no sub-grant?"

I'm actually not quite sure I understand that question because the way the Department of Education works, we only make an award to a single institution. So we don't have partnerships. We can't have a partnership.

Most of our awards go to universities because our grants are to support research efforts. So this is something that would need to be discussed, I think, again, in more detail with your program officer.

"Can the intervention be innovative and unique, one that has not been tested yet, perhaps rather radical by common standards today, if described and defined clearly?"

I guess I am trying to figure out which goal this is for. If it's for a Development, clearly you can develop it. If it's for the efficacy study, if this is something that is already fully developed, you can absolutely test it in the context of efficacy.

Here we go. Sorry. There's more. I've got to keep reading. Looking at the correlation of an intervention of wellness, fitness, and health of a child as it correlates to math performance, the major thing for you to consider and, again, I think that this is something that you probably need to talk with your program officer more closely than with me is to think about the degree to which the intervention is something that can be addressed by the school system.

One of the things that makes IES different and unique from, say, the NICHD is that the research we support has to be something that can occur in the context of the school. To the degree that that fits, you can do that.

"What is the rationale behind the two submission dates? Would this imply that an organization can submit two proposals?" Institutions can submit more than two proposals. They can submit as many proposals as they have PIs to do. The rationale behind the two submission dates is really simply to spread out the labor across the year if you want to think about this in terms of reviewer time.

So I think one of the things that I have not talked about and is important to state is that if you put in a proposal in June, you will not get reviewer feedback in time to revise and resubmit for October. So it's really only one due date per project. Okay?

"And could a Measurement project complement the Development grant? In other words, if you need to develop a tool to measure the proximal measures" Yes, they could complement it. I think within Development, too, there is some flexibility to develop some measurement tools or observational tools that could be used to look at questions of fidelity.

"To what degree do you need to use an outside evaluator for the different Goal structures?" The only place where I think outside evaluators are critical is in Scale up Evaluations. That's really the evaluation that at that level, Goal Four, is where we really want to see a firewall separation between the developer and the evaluator.

"Can we look at impact on institutions, in addition to student outcome?" I'm afraid I don't have enough content to actually address this question systematically or in a good way, but certainly under Education Policy, Finance, and Systems, I think there is room for looking at impact on institutions. Again, I would contact the program officer to talk about that in more detail.

"With multiple PIs, do you request or require a multiple PI plan? NIH has requested or required this." We don't have anything called a multiple PI plan, but what I will say is that in your personnel section, which is sort of what we will talk a little bit about here now, you should absolutely talk about the plan for managing a multiple PI project.

So particularly if the PIs are geographically diverse, how are you going to make sure that all of the team members are working together toward a common goal? Are there going to be regular phone calls? Are you going to have regular webinars? What are you going to do to make sure that all of the teams are working together toward this common goal?

So under personnel and resources, I'm going to go back to my slides now because you guys have been an active questioning group. So we've only got 15 more minutes, and I want to make sure I get through everything.

Don't forget to address these two sections within the project narrative. So you should have at least a paragraph, maybe a page for each of the personnel and resources sections.

You can use the biographical sketches, the four page CVs that are attached to the full proposal, to document expertise and productivity of the personnel on the team. And then for resources, you want to describe who are the schools you are planning to work with.

Do you have adequate computing technology to support the analysis that you're proposing to do? What about the databases, the datasets? Use appendix A to further document putting your letters of agreement from schools or your permission to use the datasets, all of that stuff.

Slide Seventy-three:

All right. So one of the things that we have not talked a lot about that I'm sure many of you on the phone are aware of is that building relationships with schools is a critical part of most of these projects.

Slide Seventy-four:

We require letters of agreement from schools or districts, whatever the appropriate level is, for all of the projects where you are planning to be working in school settings.

So just know that reviewers look for them and they read them carefully. So they look at the date. They will notice if the letters are exactly the same but with different signatures.

So the letters need to be written where it's clear that the person writing the letter at the school or district level understands what participating entails.

The question people often ask is, "Who should write the letters?". And it really depends upon what kind of a project you're proposing as well as the restrictions of the school district. So it could be the teachers. It could be the principals. It could be the district.

Slide Seventy-five:

Pay attention to formatting. Maybe you're sort of minding your P's and Q's. Please do pay attention to formatting. Your proposal will be reviewed for compliance.

And if it is not compliant, one of two things will happen. It can be returned without review or the compliance screeners, our contractor, will truncate your narrative, will truncate the sections that are too long.

So the abstract is one page, single spaced. The research narrative is no longer than 25 pages, single spaced. The bibliography is a separate PDF with no page limit. Each biographical sketch is limited to four pages.

The budget justifications for the main award as well as any sub-awards do not have page limits. Appendix A can be no longer than 15 pages. Appendix B can be no longer than ten pages.

There was a question here about page length. It says, "You're beginning to touch on length per section." When I say, 'one page for personnel, one page for resources,' is this about right, far more on the two other parts of the narrative?" Yes. And these are not mandates, but I was just sort of giving a general section.

The bulk of most proposals is really focused on the research plan because the reviewers want to know what is it you are going to do. And that is what they are making decisions on. That is what the funding supports.

"Don't the biosketches have to have a fifth page with current pending and support?" Yes, they do. So there is a fifth page that the bio sketches should include. And it's a little confusing, but there should be a fifth page with each biographical sketch that includes your current and pending support, for those of you who have additional funding. Thank you.

Slide Seventy-six:

Pay attention to what can and can't be included in the appendices. I realize I sort of feel a little bit like a broken record, but I've had too many cases where people have tried to put in narrative information into the appendix and that has been pulled. Just follow the directions because it will be pulled if it is perceived of as non compliant.

I think that this should be true for everyone who puts in a proposal. You can put together a better proposal if you have someone who is not involved in the project read a

draft. They can help. You know, they should be folks who also do research work but who aren't experts in your primary area.

You need to remember that while reviewers will be experts in their own area, it may not map directly onto the areas that you have expertise in. And so you need to write an application that is understandable to someone who is another smart person, right, someone else who has been involved in research but who doesn't share all the same background knowledge that you have.

Slide Seventy-seven:

From the reviewers' point of view, try to put on your reviewer hat when you're writing your proposal. Write it clearly and as concisely as you can. Make sure you address all of the points described in the Request for Applications. Right?

Follow the sections that are in the RFA. Organize your information in a logical sequence, where it is really clear that this leads to this leads to this.

Again, label your sections. And please number your pages. It becomes much easier for reviewers to refer you back to sections that are particularly confusing or they're not particularly clear. And particularly if your proposal is reviewed by the full panel, having page numbers really facilitates the conversation. Then everybody can be looking at the same part of the proposal.

Again, make it as easy as you can for the reviewers to find and understand the information that they need in order to adequately review your proposal.

Slide Seventy-eight:

The submission process. Please know that all proposals must be submitted electronically, and they have to be submitted through the grants.gov portal.

So you need to make sure you have a profile set up in grants.gov. And you need to begin to do the electronic part of that. Okay? You upload PDF, and you complete forms that are on the website.

The date and times that are listed on the Request for Applications are firm and fixed. There are no extensions that are granted. So proposals need to be uploaded by 4:30 p.m. Eastern Standard Time on June 26th for the first round. For the second round, they need to come in 4:30 p.m. Eastern Standard Time on October 2nd.

If you upload your proposal at 4:31, it will be marked as late and will not be reviewed. So please start early. I would say a week or two before the deadline would be a great time to get your application uploaded. And you can go back into the system and make sure that you have included everything that you need to include.

I just wanted to see. "Should all components, abstract narrative, budget narrative, be numbered consecutively or separate parts?" I actually think it's helpful if you do them as separate parts given that there are different page requirements for each of the parts.

All right. "Who should be considered key personnel, for whom a biographical sketch should be submitted?" And just to be sure, these are not included in the 25 page limit. They are not included in the 25 page limit.

As for the decision of who is the key personnel: anyone who is going to have a substantive part of the project, so anyone who is a project director, a PI, a co PI, if you have a statistician or a psychometrician or a methodologist that you're bringing on, their CV should be included.

If you have maybe someone who is helping you with the development work, who brings development, curriculum development, expertise, that person should be included. So, again, this is something that you could certainly talk with the relevant program officer about as well.

Slide Seventy-nine:

All right. I am looking at my clock. And I am going to just zip through this last part here. And I hope it will answer some questions that I see there.

So for final proposals, make sure all of your online forms are complete. Make sure that the PDFs, that the proposal's contents, have been uploaded. Make sure that your authorized representative has completed the final step of the electronic process. You as the PI are not the person to push the final button. It is your authorized representative who pushes that final button. So you need to make sure that they go all the way through. Okay?

And you will receive an e mail, which acknowledges the receipt of your application.

Slide Eighty:

So then what happens? I know I had some folks asking for the review question. Oh, wait. It says, "If the application is uploaded early, can changes still be made to the narrative sections?" I believe they can be. And you can check with the grants.gov Web site, but it is my belief, my understanding, that you can make modifications up until that 4:30 p.m. deadline on the due date.

Slide Eight-one:

All right. For the peer review process. So we have a multistage peer review process. As I've mentioned several times over the course of the call, the proposal once it is received after the due date, the first review is for compliance.

Compliance is in a couple of ways, right? So we look for compliance to the formatting requirements and page length requirements. We also review for compliance to the requirements of the RFA.

So we look for compliance to is it the right research topic? Is it the right Goal? Have they requested the right number of years? So it's a development proposal, but they are asking for four years of funding. We look for all of these sort of technical and scientific matches, right, just in terms of the content and the Goal.

If you are considered to be compliant and, just so you know, most proposals are compliant those are then assigned to a review panel. I mentioned before we have standing review panels. And those are the review panels to which I am referring now.

Two or three panel members then conduct a primary review of each application. If you put in a Goal Three or a Goal Four proposal, you can be assured that you will receive a review by three panel members. One of those reviews will be by a methodologist.

We try to get three reviewers as much as we can, but it really depends upon the number of applications that we receive. Then once you get the initial scores of all of the primary reviews, of all of the applications from all of the primary reviewers, the average

overall score of the applications is used to make decisions about which applications are assigned for full panel review.

Slide Eighty-two:

So we have a triage process. Not every proposal is reviewed by the full panel. Only those which receive the most competitive scores go forward to full-panel review.

The full panel then discusses all of the proposals that it receives or that have been put forward after triage. And they discuss the proposals. And then all the members of the panel rescore the proposals after the discussion.

Again, those panel scores come back to the program staff. And we make recommendations as to which proposals have received scores sufficiently competitive to merit funding.

At that point, once the decisions are final, applicants will receive e mail notification of the status of their application. Along with that notification will come reviewer comments. And I just wanted to make sure that folks realize that if you are not granted an award the first time, you should definitely plan on resubmitting. And you should talk with your program officer, who can help you through this process.

"When can we expect status notification and reviewer comments?" Generally, if you put in a proposal in June, you generally hear about the status of your application sometime in late January. It's about a six- to seven month turnaround.

The latest possible date that people would hear would be the earliest possible start date for the deadline that you submitted. So if you submit in June, the earliest possible start date is March 1st. If you submit in October, the earliest possible start date is July 1st of the following year.

If you are interested in participating in the review panel, what you can do is you can forward your CV to me, and I can forward it on to the Standards and Review Office. I'll give you guys my email in just a second. They will take it into consideration. And if they are in need of someone with your skill set, they will be in touch with you.

"Do applicants receive info on the assigned point total as well as reviewer comments?" If you go to full panel, you will receive information about your points. If you did not go to full panel, you will not receive information about your points. All right?

Slide Eighty-two:

I wanted to just see what else I have here.

Slide Eighty-three:

I just have one final reminder because I'm coming up on noon here. Start early. Read the Request for Applications. Talk with your program officer. Start the online submission process early.

Slide Eighty-five:

Here is our website. I want to give you all my e mail address so that if you have specific questions that I can help you with or direct you to persons who can. My e mail is

Elizabeth, e l i z a b e t h, dot, Albro, a l b r o, at ed.gov---

<mailto:Elizabeth.Albro@ed.gov>.

We have a question here which says, "Are sample score sheets available?" There is not a rubric that individuals use. You are scored on the significance, the research plan, personnel, and the resources, each of those four sections. You will get individual scores on each of those, and you get an overall score. The reviewers are asked to review against the criteria as laid out in the RFA.

Okay. Here is a question that says, "Our university has multiple campuses. Can we submit as a team and study classrooms in the separate service regions?"

I think that's probably okay. I think this is probably a university level decision, as opposed to a decision from the Institute. It sounds like it's an organizational issue.

"Must Development projects be utilized in a school setting or could the intervention involve at home student interaction?"

We do have interventions that involve an at home component. So, particularly for the Early Intervention projects or the Early Childhood projects, there can be, say, parent training involved as well, although it is true that much of our work is embedded in school settings.

All right. I think that is everything I have. And I know that we are at noon here, but I will stay on line a couple of more minutes if anyone has any other questions that they would like me to address.

Any other questions?

Well, I want to thank you all for sitting through the past two and one-half hours. I know it's hard to listen and write at the same time, but I hope this was of use to you all. I want to encourage you if you have other questions to either contact me directly or to contact your relevant program officer.

We are here to help, and it is our job to make sure that we get as many high quality proposals in to our competitions as possible. So we are here. And we can provide you with as much or as little help as you want.

So please be in touch. And I thank you for your attention.

(Whereupon, the foregoing matter was concluded.)